MORNINGSTAR | SUSTAINALYTICS

Q3 2023

The Enhanced ESG Risk Ratings

Hello,

We are pleased to inform you about enhancements to our flagship product, the ESG Risk Ratings, which will begin to roll out in May 2024.

Some of these enhancements may impact your current use of our research products and services. Beginning in Q3, we will continuously follow up with more details on these enhancements to ensure a smooth transition.

Questions? Our team is here to support you.

Executive Summary

Sustainalytic's ESG Risk Ratings, launched in November 2018, will be undergoing an important set of updates launching in the second quarter of 2024. These updates are focused on providing our clients a stronger, more impactful solution for ESG analysis. We are enhancing the quality and effectiveness of our research via the three key upgrades below which we believe will make our research more impactful and valuable for your ESG analysis.

The enhancements to the ESG Risk Ratings product will begin May 2024 and will include the following:

1. Alignment of the Methodology of the Corporate Governance baseline to the Methodology of the ESG Risk Ratings and creation of two standalone Material ESG Issues (MEIs) for Corporate- and Stakeholder Governance.

2. The process of how we assess risk through our Material ESG issues will remain the same and be further strengthened by:
   a. Carving out and enhancing Water assessments with the creation of a new Water MEI
   b. The new Raw Material Use MEI will include not only the previously available indicators, but will be strengthened and enhanced via the inclusion of new indicators
   c. Strengthening the existing Data Privacy and Security MEI by expanding on Cybersecurity
   d. Merging the Business Ethics MEI and the Bribery and Corruption MEI to enhance consistency and comparability among subindustries

3. Management Indicator updates that are designed to capture the latest standards in reporting and policies and allow further refinement of our assessments. Examples include:
   a. Improving the Employee Training indicator
   b. Including Scope 3 emissions
   c. Moving from Industry to Subindustry benchmarking for various Carbon related indicators

Client Support

As we understand these changes will have an impact on how our clients consume our data, we are preparing an extensive support package that focuses on Operational Readiness and Content Readiness. Our Operational Readiness efforts will focus on ensuring you are prepared to ingest the new data in your Data Management environment. Our Content Readiness efforts will prepare you with the necessary rationales to assess and capture these emerging trends in Material ESG Risks.

To further support our clients to see the May 2024 updates in company reports, we are planning to roll out a first iteration of a Score Change Log by the end of 2023:

→ **Score Change Logs**: Growing demand for ESG data, an increased desire for accountable records of performance changes, and impending regulation of ESG data providers are key considerations for our clients. Providing clients with additional transparency around company score changes is an ongoing consideration.

Alignment of the Corporate Governance baseline to the Methodology of our Material ESG Issues (MEIs) in the ESG Risk Ratings

The current Corporate Governance baseline leverages a separate, but embedded methodology to assess Corporate Governance risks via a company's programs and policies. We recognize that this adds additional complexity to our overarching Risk Ratings methodology. With this in mind, we will be aligning our Corporate Governance methodology to that of our Material ESG Issues (MEIs). We believe this will allow for a methodology that is easier to interpret, more transparent, and will ultimately yield a stronger Corporate Governance signal.

Our Corporate Governance rating currently consists of different layers of assessing Corporate Governance management, as depicted in Figure 1, and includes pillars which are regionally weighted. Underneath the pillars there are Management Indicators that are regionally weighted and layered on top of an overlay for certain indicator pairs. Stakeholder Governance is a pillar within the Corporate Governance Rating.

Indicators within the current Corporate Governance Rating are scored with a score of 50 being neutral.

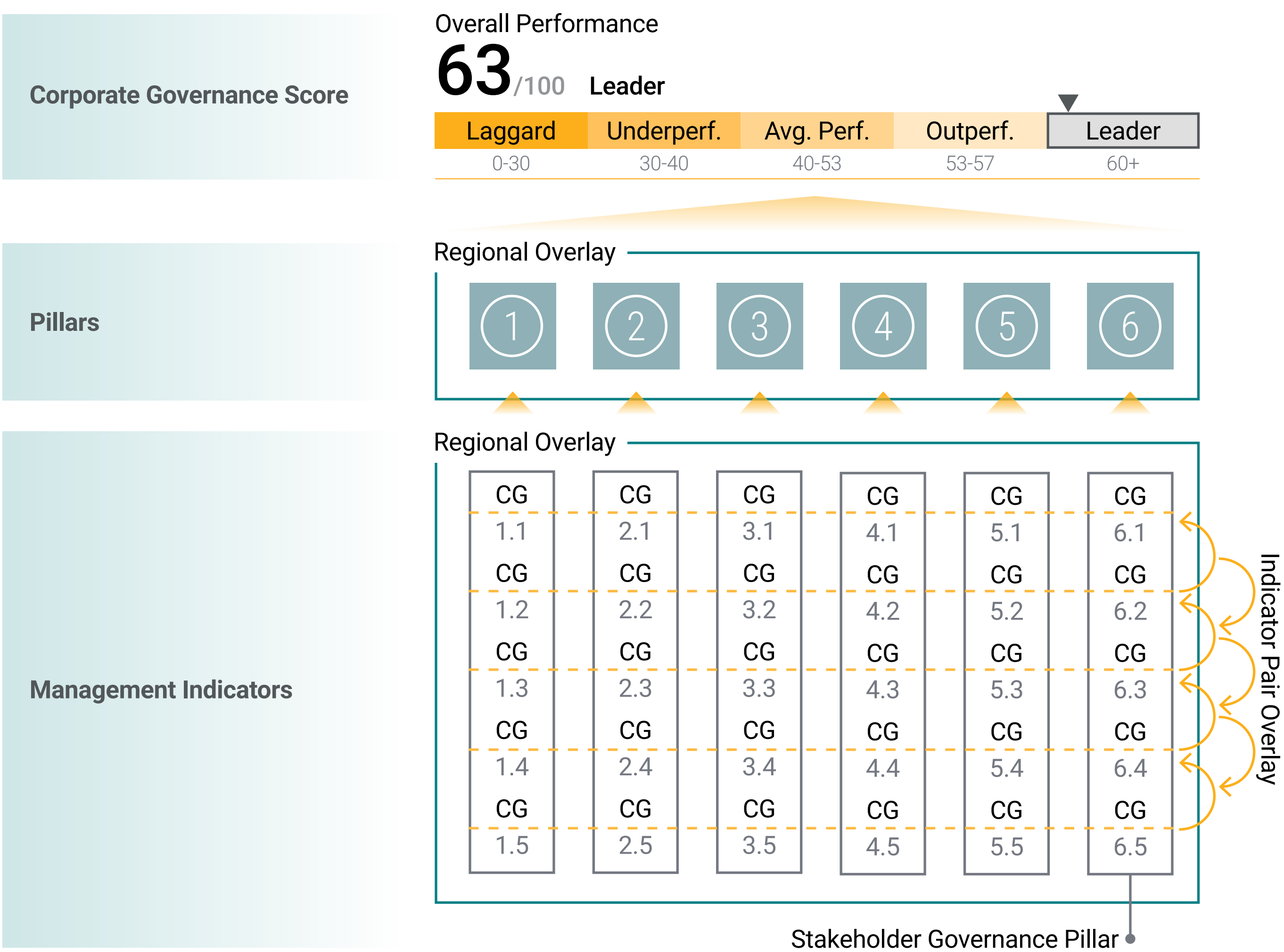


Figure 1: Current Corporate Governance Set-up

The new Corporate Governance baseline will be methodologically aligned with the other Material ESG Issues (MEIs) within the ESG Risk Ratings. Furthermore, Stakeholder Governance will be a separate MEI and will no longer fall under Corporate Governance.

What does this mean?

As the ESG Risk Ratings take a Financial Materiality perspective, the alignment of Corporate Governance with the ESG Risk Ratings methodology means that this perspective is now also considered for Corporate Governance Risks and Stakeholder Governance Risks. Practically, this means we are fully implementing the Exposure to Risk dimension for both Corporate and Stakeholder Governance. Exposure to ESG Risk is set for all subindustries with a default Exposure score, which is similar across all subindustries and then further refined to the company level by applying Beta Indicators.

Management Indicators within the new Corporate Governance and Stakeholder Governance MEIs are scored from zero to one hundred, which aligns with how all other management indicators within the ESG Risk Ratings are scored. On this scale, zero represents poor management, and is the lowest possible score, while one hundred represents best practice, and is the highest possible score.

Corporate Governance Risk Score*

3.38 ③ **Low Risk**

NEGL	LOW	MED	HIGH	SEVERE
0-2	2-4	4-6	6-8	8+

Exposure and Management

Exposure

A: Exposure Default Score	9
Beta Indicator	Beta Signal
B1	+0.15
B2	+0.08
B3	+0.02
Sum	***+0.25***
Baseline	+1.00
Issue Beta	1.25
A+B: Company exposure *(9*1.25)*	$\boxed{11.25}$ ①

Management

Management Indicator	Raw Score	Weight	Weighted Score
G.1.1	100	20%	**20**
G.1.2	100	20%	**20**
G.1.3	50	20%	**10**
G.1.4	50	20%	**10**
G.1.5	50	20%	**10**
Weighted Sum			$\boxed{70}$ ②

*Example also applies to the Stakeholder Governance MEI

Figure 2: New Corporate and Stakeholder Governance Set-up

As with all Material ESG Issues, we start by assessing the default exposure to Risk for both the Corporate and Stakeholder Governance Material ESG Issues. As previously mentioned, the default Exposure to Risk is further refined by applying Beta Indicators which leads to Exposure to Corporate and Stakeholder Governance Risk at the company level.

The second dimension is Management, by which we measure how well a company is managing their Exposure to ESG Risk. Consistent with all other MEIs within the ESG Risk Ratings, the Management dimension is measured by multiplying the raw score for each Management Indicator by the weight assigned to that Management Indicator, leading to the Weighted Score. All Weighted Scores are aggregated and result in the Management Score which is expressed as a percentage of Exposure to ESG Risk that is managed (see Figure 2).

What does this benefit?

With the methodological alignment for all Material ESG Issues, the ESG Risk Ratings methodology will be streamlined. This not only makes it easier to understand Corporate and Stakeholder Governance Risk, but also increases transparency and consistency and allows for a like-to-like comparison across all layers of a company's ESG Risk Ratings.

Additionally, we are enhancing a set of indicators within our Corporate Governance assessment to account for changing reporting standards and new legislation. For example, we have made a series of enhancements that we feel reflect the increasing expectations of a company's corporate governance arrangements and focuses on areas that have been subject to heightened scrutiny in recent years.

Specifically, we are raising the benchmark with respect to what constitutes sufficient collective relevant industry experience for non-executive members of the Board and Audit Committee. We are also enhancing our definition of Independence to consider Director's tenure, meaning that Directors with a long tenure will no longer be considered Independent.

Finally, we are making a series of changes to how we calculate Board Gender Diversity and assess Board Diversity Policies. This takes into consideration developments in company disclosures and ensures we reward companies that have a robust policy and a balance of genders on the Board.

It is important to note that all significant areas of Corporate and Stakeholder Governance, which are currently covered through the six pillars, will continue existing in the new Corporate and Stakeholder Governance MEIs as shown in Figure 3.

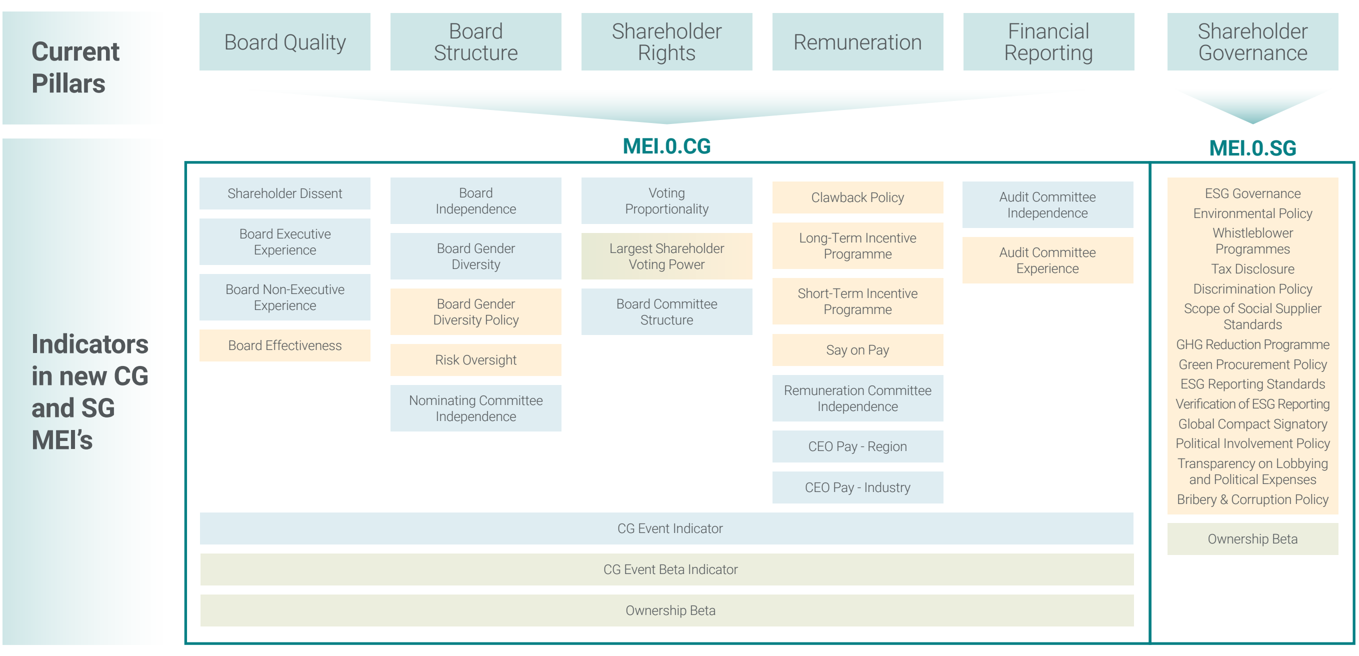


Figure 3: New Corporate and Stakeholder Governance consider all six pillars of the current Corporate Governance framework

Improving How Material ESG Issues (MEIs) are captured

By May 2024, Sustainalytics' ESG Risk Ratings will meaningfully enhance the materiality view through the inclusion of emerging ESG Risks by:

a. Carving out and enhancing Water assessments to create two new MEIs: Water Use – Own Operations and Water Use – Supply Chain

b. Remaining critical resources will be covered in the new Raw Material Use MEI

c. Strengthening the existing Data Privacy and Security MEI by expanding on Cybersecurity

d. Merging the Business Ethics MEI and the Bribery and Corruption MEI to enhance consistency and comparability across all subindustries

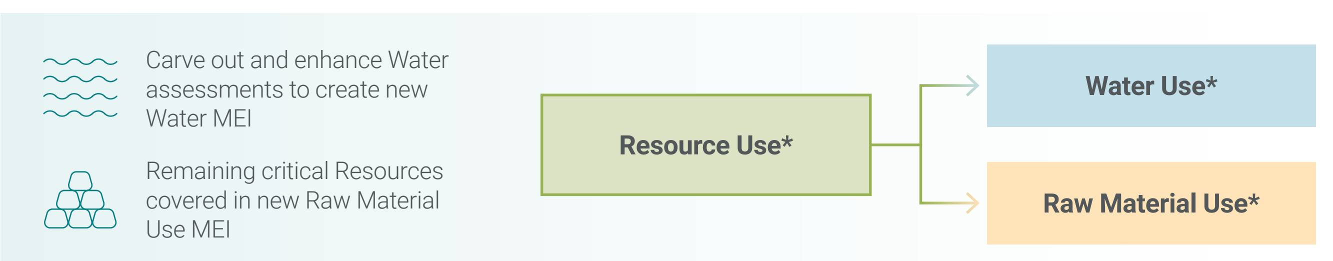
Water Use and Raw Material Use

Water-related risks are a crucial consideration in an ESG risk rating due to their significant impact on environmental sustainability, social welfare, and long-term business viability. Factors such as water stress, pollution, inadequate water infrastructure and unsustainable water management practices pose substantial challenges to companies, communities, and ecosystems worldwide. The climate crisis further exacerbates these challenges. To manage water risks, companies need to work with other stakeholders (communities, regulators) in the same watershed to build water resilience for their businesses, people and nature.

We are expanding the thematic scope of water in the ESG Risk Ratings in alignment with materiality frameworks and disclosure standards. By considering comprehensive physical, regulatory and reputational water-related risks within the ESG Risk Ratings framework, investors can better assess a company's commitment to sustainable water management practices and its ability to navigate the growing challenges related to water in its own operations and/ or supply chain.

Furthermore, the increasing number of applications of other mineral resources in the low-carbon transition are expected to drive exponential growth in demand for additional critical resources such as cobalt, nickel and rare earth elements. Clean energy technologies heavily rely on critical resources in electrification, energy storage technologies, and low-carbon power generation. As such, a possible resource constraint poses a significant risk to the energy transition if mineral supplies cannot keep pace with what is required to meet the Paris Agreement-aligned climate targets.

Through the new Raw Material Use MEI, we are enhancing our assessment of how efficiently and effectively a company uses its raw material inputs (excluding water, energy and petroleum-based products which are captured separately) in the production process and how well it manages related risks. Through circularity, eco-design, and substitutes for scarce materials a company can reduce its negative impacts on the environment, mitigate supply shortages, and enhance its resource security.

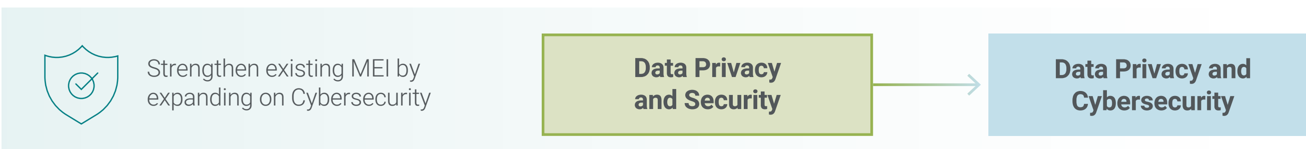


*Includes Own Operations and Supply Chain

Data Privacy and Cybersecurity

Data privacy and cybersecurity-related risks are vital considerations in an ESG Risk Rating due to the escalating threats posed by digitization and increasing operational dependence on the collection, use, or disclosure of personal information. As technology advances, businesses gather and store vast amounts of sensitive information, making them vulnerable to cyberattacks, data breaches, and privacy infringements. Beyond traditional IT systems, cyberattacks can target industrial systems, which monitor and control critical infrastructure assets, with potentially severe impacts for companies, as well as the economy and society at large.

We are strengthening the way we capture cybersecurity and privacy risks within the ESG Risk Ratings in MEI.6 – Data Privacy and Cybersecurity, in alignment with international standards and rapidly evolving regulation. By evaluating a company's privacy practices and cybersecurity safeguards – relating to both its operations and the technology products it produces, if applicable - the ESG Risk Ratings provide insights into its ability to protect the privacy of personal information, prevent and effectively respond to cyberattacks, and maintain data integrity. Companies that prioritize robust cybersecurity measures and demonstrate proactive data privacy practices not only mitigate potential reputational and financial risks but also uphold the rights and trust of their stakeholders.



Business Ethics and Bribery and Corruption

Our Business Ethics and Bribery and Corruption MEIs are merged to harmonize our approach to Business Ethics and Bribery and Corruption issues across all subindustries to enhance consistency and comparability.

Introducing New Indicators and Revisiting Existing Ones

Management indicators broadly assess the strength and quality of companies' transparency, policies, commitments, and operational systems relating to the management of ESG issues, as well as their effectiveness – for example, the Carbon Intensity Trend indicator provides a measure of the effectiveness of a company's carbon emissions reduction initiatives. Evolving regulation, international standards, and wider adoption of ESG disclosures by companies result in increased access to more reliable ESG data. This has prompted us to introduce new management indicators and revisit some of the existing ones, enhancing benchmarks and assessment criteria:

→ Inclusion of Scope 3 Emission indicators in the assessment of MEI.8.PS Carbon – Products and Services, providing a more comprehensive and accurate assessment of a company's environmental impact throughout its entire value chain

→ Intensity indicators: changing the benchmark of several quantitative performance indicators from 'industry median' to 'subindustry or industry median' (industry median is still used when there is no sufficient data available at subindustry level) – Carbon Intensity, Water Intensity, Freshwater Intensity for Generators, NOx Intensity, SOx Intensity

→ Trend indicators: compare company trend to subindustry or industry median trend thus adding another layer of insight – Carbon Intensity Trend, Water Intensity Trend, new indicator Oil and Hazardous Material Spill (replacing Oil Spill Disclosure & Performance)

→ Phasing out the Lobbying and Political Expenses indicator and replacing it with the new Transparency on Lobbying and Political Expenses to provide more meaningful differentiation between companies and align with international standards

Timelines

The ESG Risk Ratings Enhancements will be visible to clients by May 2024, when changes will start to roll out. In rolling out the changes we are considering important inputs that guide the roll-out scenario:

1. Regulatory Guidance
2. Score Fluctuations in our Universe
3. Methodological considerations

With that in mind, the changes will be implemented as follows:

→ The new Corporate and Stakeholder Governance MEIs will be introduced to all companies on a set day by May 2024. As these changes are methodological in nature, we believe the new Corporate and Stakeholder Governance MEIs must be applied to all companies at once to keep methodological consistency within the ESG Risk Ratings universe of companies.

→ The newly created and/or enhanced MEIs reflect emerging risks we see in our universe of companies. These enhancements will follow the existing methodological structure as we know it within the ESG Risk Ratings today and will follow the typical roll-out process during the company's update cycle. To spread out the scoring impact on our universe, the newly introduced and/or enhanced MEIs will be visible once a company gets their full review by our analyst team.

How would the roll-out of the enhanced Risk Ratings work for companies?
Let's describe the scenario above through an example:

Assumption: ABC Corp is regularly updated by Morningstar Sustainalytics.

1. By May 2024, ABC Corp. will receive the updated Corporate and Stakeholder MEIs in their evaluation.
2. By August 2024, during the update cycle of ABC Corp. the company will be assessed on the set of Material ESG Issues that apply to the subindustry per the usual process. Water is one of the largest issues ABC Corp. is facing, which will now be captured through the dedicated Water MEI. Furthermore, the Business Ethics MEI applies to ABC Corp, which is an enhanced MEI that merges Business Ethics and Bribery and Corruption.

This approach would also ensure that the scoring impact on our universe is spread out and does not have a disruptive effect from large score fluctuations at a single moment in time. With each change we make to components of the ESG Risk Ratings, impact on scoring is tested thoroughly to ensure a stable implementation.

Operational Implications

For our clients to be set up to ingest the changes starting May 2024, Sustainalytics will be sharing materials which will show the changes to our data delivery structure for data delivered through Data Services. For example, to be able to consume the data on the new Water MEI, we will add fields that will be reported from May 2024 onwards. The support files will show which data points will also be delivered.

For the changes made to the Corporate Governance baseline, we will also provide a mapping of the "Current" Corporate Governance data delivered versus the "New" Corporate and Stakeholder Governance data.

In this section we will provide guidance on the impact on our client delivery methods and how we will be preparing our clients to be ready by May 2024.

Global Access

The impact on our Global Access platform is limited. The format of company reports will see no change. The content of the company reports themselves will change slightly to capture the new Corporate- and Stakeholder Governance MEIs. These two new MEIs will be displayed as any other MEI within the ESG Risk Ratings.

The Global Access tools will be updated to capture any new data point that is added to the ESG Risk Ratings as part of the enhanced ESG Risk Ratings project.

Data Services

The following data delivery services are offered by our Data Services platform:

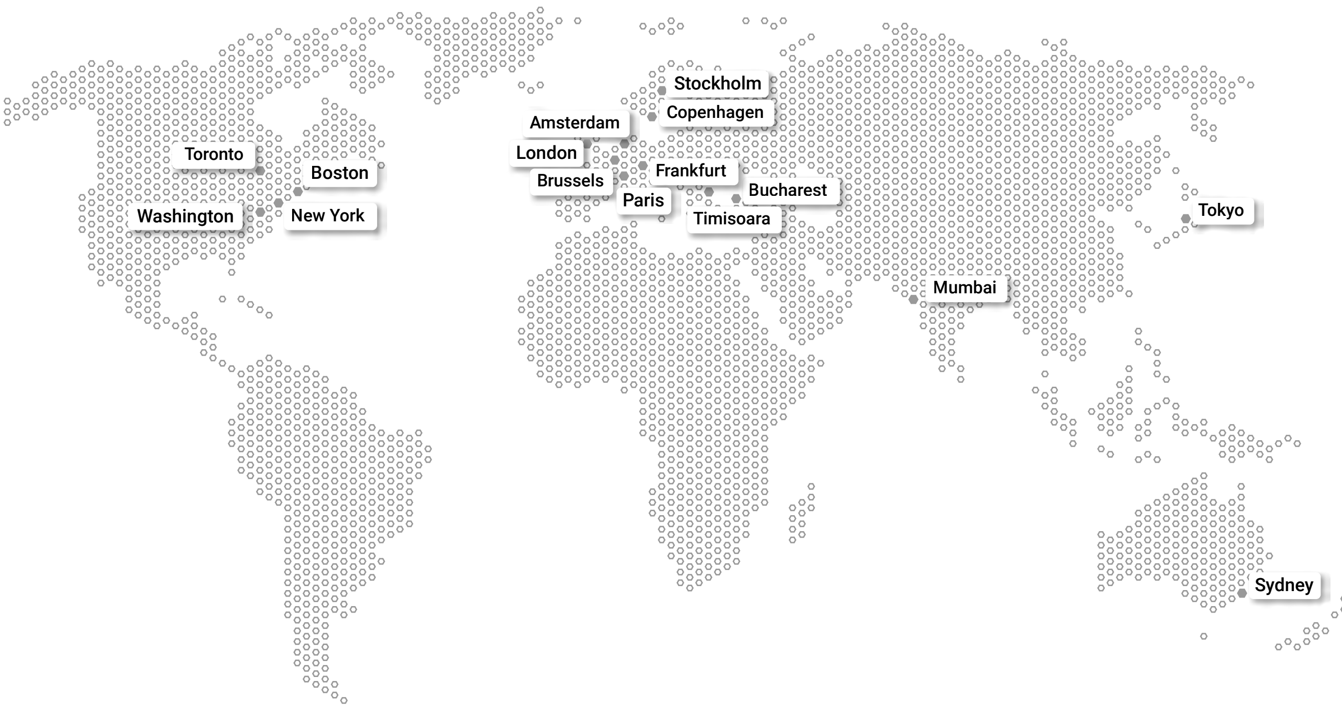
- → Accessed via Sustainalytics API *JSON*
- → Delivered via Data Delivery Portal *Excel*
- → Delivered via (S)FTP *TXT (flat files)*

All the files that are sent through these portals for the ESG Risk Ratings product are impacted as we are increasing the number of data points or changing some of the current data points. By the end of 2023, we will be providing a new data catalogue which includes all the changed and newly added data points. For the Corporate Governance changes, Sustainalytics will also be providing a mapping file which is mapping the current Corporate Governance baseline to the new Corporate- and Stakeholder Governance MEIs.

Before May 2024: Score Change Log

In response to client demand and to provide enhanced transparency (in line with upcoming global regulatory requirements), we are planning to launch the first iteration of a 'Score Change Log' for both Global Access and Data Services clients by the end of 2023. The log will help our clients understand when ESG Risk Ratings changed for individual companies and what triggered that change.

Morningstar Sustainalytics is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For more than 30 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Morningstar Sustainalytics works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The firm also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices, and capital projects. With 17 offices globally, Morningstar Sustainalytics has more than 1,800 staff members, including more than 850 analysts with varied multidisciplinary expertise across more than 40 industry groups.
For more information, visit www.sustainalytics.com.



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